

# How the Willow Tree was Identified as a Hazard and Why It will be Removed

## Mississippi National River and Recreation Area

National Park Service  
U.S. Department of the Interior



### What Prompted the Decision?

The National Park Service carefully considered the concerns of those who value Coldwater, especially those who consider this place special. The Park Service's first and foremost responsibility is to ensure that visitors to the National Parks are not in harm's way when experiencing the Nation's most treasured natural, cultural and historic resources. Park Service management policy clearly states that, "The saving of human life will take precedence over all other management actions as the Park Service strives to protect human life and provide for injury-free visits." (Management Policies 2006). The Park Service accomplishes this by applying nationally accepted codes, standards, and principles.

### What Information was used to make the Decision?

When people visit Coldwater, they come to experience the spring and reservoir. The location of the willow in a high traffic, well-used area adds to the potential for visitor injury should limbs fall. The pictures and descriptions below outline the recommendations of the U.S. Forest Service and Minnesota Department of Natural Resources for identifying hazard trees. The Park Service follows these guidelines when assessing the potential for hazard trees within the Park.

The Park Service also employed the expertise of two regionally recognized and ISA Certified Arborist firms to provide professional opinions on the condition and safety of the willow tree in a public gathering area. Both recommended removal of the tree.

### Where can I get more information?

For more information on hazard trees and urban forestry:

- USDA Forest Service - Northeastern Area:  
[http://www.na.fs.fed.us/fhp/hazard\\_tree](http://www.na.fs.fed.us/fhp/hazard_tree)

For more information on this project or for future plans for Coldwater:

- Mississippi National River and Recreation Area:  
<http://www.nps.gov/miss>

## Deadwood

Example



Willow



Dead trees and branches are unpredictable and can break and fall at any time.

Immediate action is necessary if:

- A broken branch or top is lodged in a tree
- A tree is dead
- A branch is dead of sufficient size to cause injury

## Cracks

Example



Willow



A crack is a deep split through the bark, extending into the wood of the tree.

Immediate action is necessary if:

- A crack extends deeply into, or completely through the stem
- Two or more cracks occur in the same general area of the stem
- A crack is in contact with another defect
- A branch of sufficient size to cause injury is cracked

## Weak Branch Unions

Example



Willow



Weak branch unions are places where branches are not strongly attached to the tree.

Immediate action is necessary if:

- A weak branch union occurs on the main stem
- A weak branch union is cracked
- A weak branch union is associated with a crack, cavity, or other defect

## Decay

Example



Willow



Decay can be identified by wood that is soft, punky, or crumbly, a cavity where the wood is missing, or fungal activity.

Immediate action is necessary if:

- Advanced decay is associated with cracks, weak branch unions, or other defects
- A branch of sufficient size to cause injury is decayed
- The thickness of sound wood is less than 1" for every 6" of diameter at any point on the stem